What is claimed is:

1.   A method for adjusting data modulation at a base station comprising:

receiving data at a transmitter for transmission;

formatting the received data into packets for transmission, each packet having a particular type of encoding/data modulation;

transmitting the packets;

monitoring a return channel for receipt of an acknowledgment for each packet that the packet has been received;

retransmitting a packet at the transmitter, if an acknowledgment for that packet has not been received;

collecting retransmission statistics; and

adjusting each particular type of encoding/data modulation using the collected retransmission statistics.

2.   The method of claim 1 wherein the particular type of encoding/data modulation is forward error correction (FEC).

3.   The method of claim 2 wherein the packets are transmitted using an orthogonal frequency division multiple access (OFDMA) air interface and the particular FEC

encoding/data modulation adjusting is performed in addition to selective nulling of subchannels in an OFDMA set.

4.   The method of claim 1 wherein the packets are transmitted using a single carrier having a frequency domain equalization (SC-FDE) air interface.

5.   The method of claim 1 wherein the return channel is the fast feedback channel when the packets are transmitted using a code division multiple access (CDMA) air interface.

6.   The method of claim 1 further comprising:

identifying a packet as having an unacceptable error rate responsive to receipt of a negative acknowledgment.

7.   A method for adjusting data modulation at a base station, comprising:

formatting data into packets for transmission over a wireless air interface;

receiving packets of data over said air interface, each packet having a particular encoding/data modulation;

for each received packet, generating and transmitting a positive acknowledgment at the physical layer of said air interface when a received packet has an acceptable error rate.

8.   The method of claim 7 wherein the positive acknowledgments are transmitted on the fast feedback channel when said air interface is a code division multiple access (CDMA).

9.   The method of claim 7 further comprising transmitting a negative acknowledgment if that packet has an unacceptable error rate.